

## **RAW SEQUENCE LISTING**

**The Biotechnology Systems Branch of the Scientific and Technical  
Information Center (STIC) no errors detected.**

Application Serial Number: 10/575, 121  
Source: IFWP  
Date Processed by STIC: 04/24/2006

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IFWP

## RAW SEQUENCE LISTING

DATE: 04/24/2006

PATENT APPLICATION: US/10/575,121

TIME: 16:11:29

Input Set : A:\119-PCT1-US1.ST25.txt

Output Set: N:\CRF4\04242006\J575121.raw

3 <110> APPLICANT: ELENA FEINSTEIN et al.  
 5 <120> TITLE OF INVENTION: BONE MORPHOGENETIC PROTEIN (BMP) 2A AND USES THEREOF  
 7 <130> FILE REFERENCE: 119/PCT1-US1  
 C--> 9 <140> CURRENT APPLICATION NUMBER: US/10/575,121  
 C--> 10 <141> CURRENT FILING DATE: 2006-04-07  
 12 <150> PRIOR APPLICATION NUMBER: 60/509279  
 13 <151> PRIOR FILING DATE: 2003-10-07  
 15 <160> NUMBER OF SEQ ID NOS: 67  
 17 <170> SOFTWARE: PatentIn version 3.2  
 19 <210> SEQ ID NO: 1  
 20 <211> LENGTH: 1547  
 21 <212> TYPE: DNA  
 22 <213> ORGANISM: Homo sapiens  
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 27 tgccccagcg gagcctgctt cgccatctcc gagccccacc gccctccac tcctcggcct 120  
 29 tgccccagac tgagacgctg ttcccagcgt gaaaagagag actgcgcggc cggcaccg 180  
 31 gagaaggagg aggcaaagaa aaggaacgga cattcggtcc ttgcgccagg tcctttgacc 240  
 33 agagtttttc catgtggacg ctctttcaat ggacgtgtcc ccgcgtgctt cttagacgga 300  
 35 ctgcggtctc cttaaaggctg accatggtgg ccgggacccg ctgtcttcta gcgttgctgc 360  
 37 ttccccaggt cctcctgggc ggcgcggctg gcctcgttcc ggagctgggc cgcaggaagt 420  
 39 tcgcggcggc gtcgtcgggc cgccctcat ccagccctc tgacgaggtc ctgagcgagt 480  
 41 tcgagttgcg gctgctcagc atgttcggcc tgaaacagag acccaccccc agcagggacg 540  
 43 ccgtggtgcc cccctacatg ctagacctgt atcgcaggca ctcaggtcag ccgggctcac 600  
 45 ccgccccaga ccaccgggtg gagaggcgag ccagccgagc caacactgtg cgcagcttcc 660  
 47 accatgaaga atctttgga gaactaccag aaacgagtgg gaaaacaacc cggagattct 720  
 49 tctttaattt aagttctatc ccacggagg agtttatcac ctacgcagag cttcaggttt 780  
 51 tccgagaaca gatgcaagat gctttaggaa acaatagcag tttccatcac cgaattaata 840  
 53 tttatgaaat cataaaacct gcaacagcca actcgaaatt ccccgtagcc agacttttgg 900  
 55 acaccagggt ggtgaatcag aatgcaagca ggtgggaaag ttttgatgtc acccccgctg 960  
 57 tgatgcggtg gactgcacag ggacacgcca accatggatt cgtggtggaa gtggccact 1020  
 59 tggaggagaa acaagggtgt tccaagagac atgttaggat aagcaggtct ttgcaccaag 1080  
 61 atgaacacag ctggtcacag ataaggccat tgctagtaac ttttggccat gatggaaaag 1140  
 63 ggcacacctc ccacaaaaga gaaaaacgtc aagccaaaca caaacagcgg aaacgcctta 1200  
 65 agtccagctg taagagacac cctttgtacg tggacttcag tgacgtgggg tggaatgact 1260  
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 69 tggtgatca tctgaactcc actaatcatg ccattgttca gacgttggtc aactctgtta 1380  
 71 actetaagat tcctaaggca tgcgtgtgcc cgacagaact cagtgtatc tcgatgctgt 1440  
 73 accttgacga gaatgaaaag gttgtattaa agaactatca ggacatggtt gtggagggtt 1500  
 75 gtgggtgtcg ctagtacagc aaaattaaat acataaatat atatata 1547  
 78 <210> SEQ ID NO: 2  
 79 <211> LENGTH: 396  
 80 <212> TYPE: PRT

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81 &lt;213&gt; ORGANISM: Homo sapiens

83 &lt;400&gt; SEQUENCE: 2

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85 Met Val Ala Gly Thr Arg Cys Leu Leu Ala Leu Leu Leu Pro Gln Val
86 1          5          10          15
89 Leu Leu Gly Gly Ala Ala Gly Leu Val Pro Glu Leu Gly Arg Arg Lys
90          20          25          30
93 Phe Ala Ala Ala Ser Ser Gly Arg Pro Ser Ser Gln Pro Ser Asp Glu
94          35          40          45
97 Val Leu Ser Glu Phe Glu Leu Arg Leu Leu Ser Met Phe Gly Leu Lys
98          50          55          60
101 Gln Arg Pro Thr Pro Ser Arg Asp Ala Val Val Pro Pro Tyr Met Leu
102 65          70          75          80
105 Asp Leu Tyr Arg Arg His Ser Gly Gln Pro Gly Ser Pro Ala Pro Asp
106          85          90          95
109 His Arg Leu Glu Arg Ala Ala Ser Arg Ala Asn Thr Val Arg Ser Phe
110          100          105          110
113 His His Glu Glu Ser Leu Glu Glu Leu Pro Glu Thr Ser Gly Lys Thr
114          115          120          125
117 Thr Arg Arg Phe Phe Phe Asn Leu Ser Ser Ile Pro Thr Glu Glu Phe
118          130          135          140
121 Ile Thr Ser Ala Glu Leu Gln Val Phe Arg Glu Gln Met Gln Asp Ala
122 145          150          155          160
125 Leu Gly Asn Asn Ser Ser Phe His His Arg Ile Asn Ile Tyr Glu Ile
126          165          170          175
129 Ile Lys Pro Ala Thr Ala Asn Ser Lys Phe Pro Val Thr Arg Leu Leu
130          180          185          190
133 Asp Thr Arg Leu Val Asn Gln Asn Ala Ser Arg Trp Glu Ser Phe Asp
134          195          200          205
137 Val Thr Pro Ala Val Met Arg Trp Thr Ala Gln Gly His Ala Asn His
138          210          215          220
141 Gly Phe Val Val Glu Val Ala His Leu Glu Glu Lys Gln Gly Val Ser
142 225          230          235          240
145 Lys Arg His Val Arg Ile Ser Arg Ser Leu His Gln Asp Glu His Ser
146          245          250          255
149 Trp Ser Gln Ile Arg Pro Leu Leu Val Thr Phe Gly His Asp Gly Lys
150          260          265          270
153 Gly His Pro Leu His Lys Arg Glu Lys Arg Gln Ala Lys His Lys Gln
154          275          280          285
157 Arg Lys Arg Leu Lys Ser Ser Cys Lys Arg His Pro Leu Tyr Val Asp
158          290          295          300
161 Phe Ser Asp Val Gly Trp Asn Asp Trp Ile Val Ala Pro Pro Gly Tyr
162 305          310          315          320
165 His Ala Phe Tyr Cys His Gly Glu Cys Pro Phe Pro Leu Ala Asp His
166          325          330          335
169 Leu Asn Ser Thr Asn His Ala Ile Val Gln Thr Leu Val Asn Ser Val
170          340          345          350
173 Asn Ser Lys Ile Pro Lys Ala Cys Cys Val Pro Thr Glu Leu Ser Ala
174          355          360          365
177 Ile Ser Met Leu Tyr Leu Asp Glu Asn Glu Lys Val Val Leu Lys Asn

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182 385      390      395
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187 <212> TYPE: DNA
188 <213> ORGANISM: Homo sapiens
190 <400> SEQUENCE: 3
191 cactgtgcgc agcttccac 19
194 <210> SEQ ID NO: 4
195 <211> LENGTH: 19
196 <212> TYPE: DNA
197 <213> ORGANISM: Homo sapiens
199 <400> SEQUENCE: 4
200 cagatgcaag atgcttttag 19
203 <210> SEQ ID NO: 5
204 <211> LENGTH: 19
205 <212> TYPE: DNA
206 <213> ORGANISM: Homo sapiens
208 <400> SEQUENCE: 5
209 gaactatcag gacatgggtt 19
212 <210> SEQ ID NO: 6
213 <211> LENGTH: 19
214 <212> TYPE: DNA
215 <213> ORGANISM: Homo sapiens
217 <400> SEQUENCE: 6
218 tgacgagaat gaaaagggtt 19
221 <210> SEQ ID NO: 7
222 <211> LENGTH: 19
223 <212> TYPE: DNA
224 <213> ORGANISM: Homo sapiens
226 <400> SEQUENCE: 7
227 gctgtacctt gacgagaat 19
230 <210> SEQ ID NO: 8
231 <211> LENGTH: 19
232 <212> TYPE: DNA
233 <213> ORGANISM: Homo sapiens
235 <400> SEQUENCE: 8
236 cgacagaact cagtgtctat 19
239 <210> SEQ ID NO: 9
240 <211> LENGTH: 19
241 <212> TYPE: DNA
242 <213> ORGANISM: Homo sapiens
244 <400> SEQUENCE: 9
245 ggtcaactct gttaactct 19
248 <210> SEQ ID NO: 10
249 <211> LENGTH: 19
250 <212> TYPE: DNA
251 <213> ORGANISM: Homo sapiens

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Input Set : A:\119-PCT1-US1.ST25.txt

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257 <210> SEQ ID NO: 11
258 <211> LENGTH: 19
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262 <400> SEQUENCE: 11
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266 <210> SEQ ID NO: 12
267 <211> LENGTH: 19
268 <212> TYPE: DNA
269 <213> ORGANISM: Homo sapiens
271 <400> SEQUENCE: 12
272 ccacaaaaga gaaaaacgt 19
275 <210> SEQ ID NO: 13
276 <211> LENGTH: 19
277 <212> TYPE: DNA
278 <213> ORGANISM: Homo sapiens
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281 gcatacctctc cacaaaaga 19
284 <210> SEQ ID NO: 14
285 <211> LENGTH: 19
286 <212> TYPE: DNA
287 <213> ORGANISM: Homo sapiens
289 <400> SEQUENCE: 14
290 cttccaccat gaagaatct 19
293 <210> SEQ ID NO: 15
294 <211> LENGTH: 19
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296 <213> ORGANISM: Homo sapiens
298 <400> SEQUENCE: 15
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305 <213> ORGANISM: Homo sapiens
307 <400> SEQUENCE: 16
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311 <210> SEQ ID NO: 17
312 <211> LENGTH: 19
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314 <213> ORGANISM: Homo sapiens
316 <400> SEQUENCE: 17
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320 <210> SEQ ID NO: 18
321 <211> LENGTH: 19
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326 gtaccttgac gagaatgaa                                19
329 <210> SEQ ID NO: 19
330 <211> LENGTH: 19
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332 <213> ORGANISM: Homo sapiens
334 <400> SEQUENCE: 19
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339 <211> LENGTH: 19
340 <212> TYPE: DNA
341 <213> ORGANISM: Homo sapiens
343 <400> SEQUENCE: 20
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348 <211> LENGTH: 19
349 <212> TYPE: DNA
350 <213> ORGANISM: Homo sapiens
352 <400> SEQUENCE: 21
353 tcagtgtat ctcgatgct                                19
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357 <211> LENGTH: 19
358 <212> TYPE: DNA
359 <213> ORGANISM: Homo sapiens
361 <400> SEQUENCE: 22
362 gaactcagt ctatctcga                                19
365 <210> SEQ ID NO: 23
366 <211> LENGTH: 19
367 <212> TYPE: DNA
368 <213> ORGANISM: Homo sapiens
370 <400> SEQUENCE: 23
371 agaactcagt gctatctcg                                19
374 <210> SEQ ID NO: 24
375 <211> LENGTH: 19
376 <212> TYPE: DNA
377 <213> ORGANISM: Homo sapiens
379 <400> SEQUENCE: 24
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384 <211> LENGTH: 19
385 <212> TYPE: DNA
386 <213> ORGANISM: Homo sapiens
388 <400> SEQUENCE: 25
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393 <211> LENGTH: 19
394 <212> TYPE: DNA
395 <213> ORGANISM: Homo sapiens
397 <400> SEQUENCE: 26
398 ctaaagcatc ttgcatctg                                19

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**VERIFICATION SUMMARY**

PATENT APPLICATION: US/10/575,121

DATE: 04/24/2006

TIME: 16:11:31

Input Set : A:\119-PCT1-US1.ST25.txt

Output Set: N:\CRF4\04242006\J575121.raw

L:9 M:270 C: Current Application Number differs, Replaced Current Application Number

L:10 M:271 C: Current Filing Date differs, Replaced Current Filing Date